

HERBARIUM AND FIELD STUDIES OF KENTUCKY PLANTS II. NEW STATE RECORDS AND RARITIES¹

EDWARD T. BROWNE, JR.²

Department of Biology, Memphis State University, Memphis, TN 38152

This paper records several species that are apparently new to Kentucky or else are extremely rare in the state. Specimens in the combined Gray Herbarium - Arnold Arboretum Herbarium, the New York Botanical Garden Herbarium, and the United States National Herbarium were examined. I express appreciation to the curatorial staffs of these institutions. Collection numbers of most collections cited are those of the writer and his wife, here abbreviated EMB & ETB. Specimens are deposited in the Memphis State University Herbarium unless otherwise indicated, and duplicates are being distributed elsewhere.

Cyperus rotundus L. This is a serious weed farther south. Although the species has been established in Kentucky for some time, this is apparently only the second report. Gunn (1968) listed *C. rotundus* for the area included in his eight-county survey but did not indicate a more specific locality. According to Mr. D. C. Byers of Monticello, Kentucky, the species was introduced there with strawberry plants from Alabama in 1961, and it is now all over Wayne Co., carried about in soil on cultivators. Collection data: vegetable garden, 212 S. Main, Monticello, Wayne Co., 20 May 1966, EMB & ETB 11833 (with John Warden).

Wolffia papulifera C. H. Thompson. This small aquatic monocot is previously unreported for the state; I found no Kentucky specimens in the herbaria examined. Gentry (1963), in an unpublished thesis, suspected that this and *Lapsana communis* L. (see below) were new state records. *Wolffia papulifera* periodically occurs in great numbers on the surface of ponds. Collection data: duck ponds, Lexington Cemetery, Lexington, Fayette Co., 17 Oct 1965, EMB & ETB 11590.3; N side of Lecompte's Bottom in lake along Kentucky River, Henry Co., 20 Oct 1962, J. L. Gentry, Jr. 846.

Chaenomeles speciosa (Sweet) Nakai (*Chaenomeles lagenaria* of auth., not (Loisel.) Koidz.) This, collected as an escape, has not been previously reported from Kentucky. I have seen no specimens from any of the surrounding states although Sharp (1960) reports *Cydonia japonica* Pers. as persistent in Tennessee, and this may be a synonym. Collection data: open mesophytic woods and clearings on river flood plain just N of jct. Ky. 986 at bridge over Little Sandy River, Rosedale, Carter Co., 23 May 1965, EMB

¹ Contribution No. 5, Kentucky Flora Project, Memphis State University.

² Appreciation is expressed to the Faculty Research Committee, Memphis State University, for providing funds to enable me to visit the herbaria mentioned in this paper.

& ETB 10173; 0.6 mi E of jct. Ky. 174 and US 60, between highway and C. & O. RR tracks, Rowan Co., 23 Apr 1966, EMB & ETB 11680.

Arachis hypogaea L. This species is not grown commercially in Kentucky, and it is seldom cultivated in gardens. There are neither reports in the literature nor records in the herbaria of its occurrence in the state (the *Arachis* specimens in US were out when I checked there). It is doubtful that *A. hypogaea* would survive winter conditions in Kentucky or much farther north. We collected *A. hypogaea* at a garbage dump, which we revisited ten years later to observe if the species had survived there. No trace of it was found. Considerable disturbance was evident—fire, flooding, clearing, and cultivation. Any one of these could well account for its absence as well as that of many of the native species originally there. Collection data: garbage dump, E end of US 62 bridge over Green River, Ohio Co., 8 Jul 1962, EMB & ETB 5766 (KY).

Erodium cicutarium (L.) L'Her. This species is apparently spread as an agricultural contaminant in fertilizers and/or feed: its habitat indicates dissemination of this type. It might be expected to occur in Kentucky based on the range given in Gleason and Cronquist (1953): “. . . throughout most of the U. S.” Unfortunately, folders 2 - 7 were out when the NY collections were checked, and so positive confirmation of *E. cicutarium* as a species new to Kentucky must rest primarily on the literature. Collection data: off Cooper Drive along roadside by University of Kentucky Herbicide Building, Lexington, Fayette Co., 27 Apr 1965, Bruce W. Mook 70; in field, Agricultural Experiment Station Main Farm, University of Kentucky campus near Horticulture Herbicide House, Lexington, Fayette Co., 26 Apr 1965, Frank Melton s.n. (KY).

Euonymus kiautschovica Loes. Common in cultivation in areas of dense population. Seeds are spread by birds, and the species is a frequent escape. Some may identify this as *E. Fortunei* (Turcz.) Hand.-Mazz., a prostrate, evergreen species; *E. kiautschovica* is tardily deciduous and upright unless growing against a tree or wall in which case it becomes attached by adventitious roots (Rehder, 1940). Young *E. kiautschovica* may be somewhat trailing and evergreen, but older plants become almost devoid of leaves by the end of winter. The species grows against almost every tree on the University of Kentucky campus. Collection data: plants established under shrubs and in fence rows from seed scattered by birds (no cultivated plants of this species are known to grow in the near vicinity), 1234 Kastle Rd., Lexington, Fayette Co., 19 Mar 1966, EMB & ETB 11634.

Hedera helix L. This is a relatively infrequently cultivated ornamental in central Kentucky, where it is near its northern limit. There are no Kentucky specimens in the herbaria visited. Only Gunn (1968) and Duncan (1967) previously listed this species as an escape in Kentucky. Duncan's report is based on the collection cited. Collection data: roadsides and C. & O. RR right-of-way 6 mi E of jct. Ky. 182 and US 60, Aden Springs, Carter Co., 23 Apr 1966, EMB & ETB 11713.

Chaenorrhinum minus (L.) Lange. Reported previously only by Gunn (1968). This species may be much more widespread and abundant than his and my reports indicate since it is usually small and easily overlooked. Collection data: 2.1 mi S of bridge over Hinkston Creek, roadside between highway (US 68) and L. & N. RR tracks, Millersburg, Bourbon Co., 29 Jun 1966, *EMB & ETB* 12139.

Artemisia ludoviciana Nutt. This species, an old, widely-grown ornamental, may not be native to Kentucky. In both places where its varieties were collected, the plants had obviously spread from cultivation—which may be expected to occur more frequently near homes now abandoned due to adverse economic conditions especially in the Appalachian region. *Artemisia ludoviciana* var. *gnaphalodes* is listed by Gunn (1968), but there are no other literature references or specimens in the herbaria. Collection data: var. *ludoviciana*: growing wild on roadside at jct. Ky. 94 and Ky. 307, Hickman Co., 29 Jun 1962, *EMB & ETB* 5636, !Arthur Cronquist; var. *gnaphalodes* (Nutt.) T. & G.: Ky. 174 roadside, 1.6 mi W of Rowan-Carter Co. line, between highway and C. & O. RR tracks, Rowan Co., 15 May 1966, *EMB & ETB* 11737.

Lapsana communis L. This introduction is new to Kentucky. It might have been expected there, for Gleason and Cronquist (1963) stated “. . . now found throughout our range” and I saw collections from Indiana, West Virginia, and Virginia. Collection data: 1.3 mi W of jct. Ky. 389 and Ky. 202, hillside, edge of deciduous woods and grown-up field, Drennon Chapel, Henry Co., 3 Aug 1962, *J. L. Gentry, Jr.* 607.

REFERENCES

- DUNCAN, W. H. 1967. Woody vines of the southeastern states. *Sida* 3: 1-76.
 GENTRY, J. L., JR. 1963. Vascular plants of Henry Co., Kentucky. Unpublished M. S. Thesis, University of Kentucky.
 GLEASON, H. A., and A. CRONQUIST. 1963. Manual of vascular plants. D. Van Nostrand, Princeton, NJ.
 GUNN, C. R. 1968. The flora of Jefferson and seven adjacent counties, Kentucky. *Ann. Ky. Soc. Nat. Hist.* 2: 1-322.
 REHDER, A. 1940. Manual of cultivated trees and shrubs. 2nd ed. Macmillan, New York.
 SHARP, A. J. 1960. A preliminary checklist of dicots in Tennessee. Knoxville. (Mimeo.)